WHAT IS CLAIMED IS;

1.   1.   A side airbag system comprising:

2   a side airbag unit, which deploys an airbag to the sideward

3   with respect to an occupant sitting on a vehicle seat;

4   5   a posture detector, which determines a posture of said

5   occupant;

6   a weight detector, which measures a weight of said

7   occupant; and

8   a deployment controller, which controls the deployment of

9   10   said airbag based on said posture and weight of said occupant.

1   2.   A side airbag system according to claim 1, wherein

2   said deployment controller allows the deployment of said

3   airbag irrespective of the posture of said occupant, when said

4   15   weight measured by said weight detector exceeds a threshold

5   value.

1   3 .   A side airbag system according to claim 1, wherein

2   said side airbag unit is provided on one side of a seat

3   20   back of said vehicle seat, and

4   said posture detector includes:

5   a plurality of first sensors, which are placed on said seat

6   back and are lined up at regular interval along the up-and-down

7   direction with respect to said seat back, and

8   25   a second sensor, which is placed on the one side of said

9   seat back.

1   4. A side airbag system according to claim 3, wherein

2   said posture detector categorizes said posture of said

3   occupant into one of posture categories based on the detection

4   5   result of said first sensor and second sensor, and said posture

5   detector outputs a posture information, which indicates said

6   posture category, to said deployment controller,

7   said weight detector categorizes said weight of said

8   occupant into one of weight categories, and said weight

9   10   detector outputs a weight information, which indicates said

10   weight category, to said deployment controller, and

11   said deployment controller controls the deployment of

12   said airbag based on said posture information and said weight

13   information.

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1   5. A side airbag system according to claim 3, wherein

2   said posture detector categorizes said posture of said

3   occupant into one of three types of posture categories of

4   "VACANT", "LEANING", and "NORMAL", and said posture detector

5   20   outputs a posture information, which indicates said posture

6   category, to said deployment controller,

7   said weight detector categorizes said weight of said

8   occupant into one of four types of weight categories of "EMPTY",

9   "LOW", "HIGH", and "FAULT", and said weight detector outputs

10   25   a weight information, which indicates said weight category, to

11   said deployment controller, and

12   said deployment controller controls the deployment of

13   said airbag based on said posture information and said weight

14   information.

1   5   6.   A side airbag system according to claim 5, wherein

2   said deployment controller forbids the deployment of said

3   airbag if said weight category is "EMPTY" and said posture

4   category is "VACANT".

1   10   7.   A side airbag system according to claim 5, wherein

2   said deployment controller determines whether or not to allow

3   the deployment of said airbag based on said posture information

4   when said weight category is "FAULT".

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